FACT SHEET

L-915

DISTRIBUTE GRAZING FOR RANGE IMPROVEMENT

B. J. Ragsdale & J. Daniel Rodgers
Extension Range Specialists
Texas A&M University

Four major considerations in management of grazing on rangeland are:

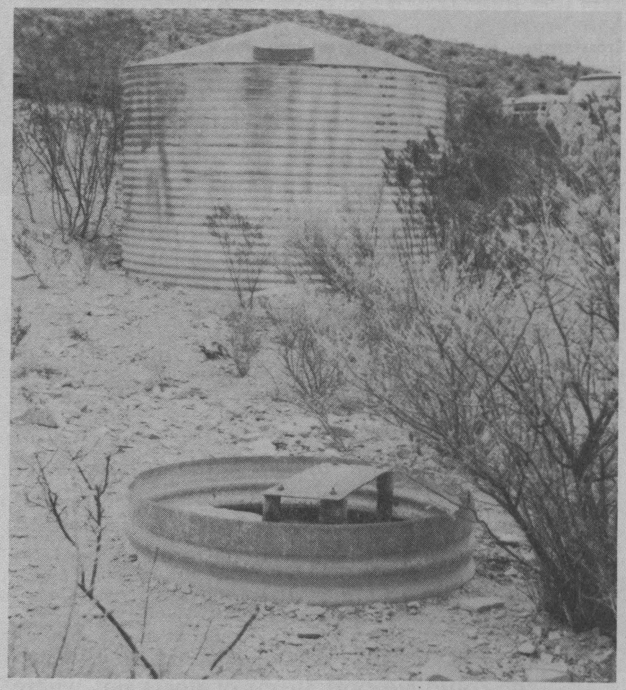
1. *Graze each pasture as uniformly as possible.*
2. Graze with the proper kind of livestock.
3. Graze with the proper number of animals.
4. Graze each pasture at a proper season of the year.

Proper grazing distribution within each pasture requires distribution of grazing animals within a grazed area to obtain uniform use of range forage.

Among factors to consider are the preferences of certain kinds of livestock for certain kinds of terrain. For example, cattle show greatest preference for lowlands while sheep and horses prefer highlands. This appears to be related to the ancestral history of our domesticated livestock.

Also consider grazing during the proper season because different kinds of vegetation are preferred at different seasons. For example, part of a range or pasture with a predominance of cool-season plants would be poorly utilized during the warm season and possibly overutilized in the winter.

The relation of proper numbers of animals to grazing distribution is even more significant. In very lightly stocked pastures, animals use only the choicest parts; too many animals grazing may result in overutilization and destruction of forage plants over major portions.



Development of new watering facilities in underutilized areas helps secure uniform utilization of a pasture.

Other factors influencing animal distribution, therefore uniformity of grazing, include:

1. Location of stock water and time of year it is available
2. Location of salt, minerals and protein supplements
3. Location of fences as they affect natural movements of grazing animals with respect to topography and prevailing wind direction
4. Areas of dense brush

Texas A&M University • Agricultural Extension Service • John E. Hutchison, Director • College Station

Crossfencing to divide pastures into more manageable units insures better distribution of livestock grazing.

At best, it may be expected that 5 to 10 percent of a pasture will be overutilized around watering places because of normal concentration, along ranch roads and under shade trees if they are few.

If you have a problem in getting uniform grazing on a pasture — more than 5 to 10 percent grazed too closely — this check list may provide a solution.

1. *Proper location of salt and supplemental feeds* secures movement of animals into underutilized areas if location is moved gradually so that new location can be seen from former location.

2. *Predator control* frees areas where the forage could support sheep or goats but where predators previously restricted the kind of livestock to cattle.

3. *Fire,* used judiciously to improve palatability, may cause animals to graze certain areas.

4. *Fertilization* of certain areas of a pasture to improve palatability may improve distribution.

5. *Mowing* of old growth may result in animals grazing mowed area.

6. *Insect control* may allow livestock to graze all parts of a pasture instead of congregating in certain areas to avoid insects.

7. *Change breed or kind of livestock* because some breeds tend to travel a greater distance for forage and water. A mixture of kinds may better use a pasture with varied topography and vegetation.

8. *Deferred-rotation grazing systems* generally result in more uniform distribution of grazing throughout a pasture because the stocking rates are high while the pasture is grazed and zero when rested.

9. *Construct trails into inaccessible areas to* aid use of certain areas in rough mountainous terrain.

10. *Use herding or drifting* to move livestock into underutilized areas.

11. *Clear passage ways* through extensive areas of dense brush.

12. *Construct cattle walkways into coastal marsh ranges.*

13. *Construct shelters or plant shelter-belts at strategic locations* where natural protection is unavailable. Livestock concentrate on south side out of wind in winter.

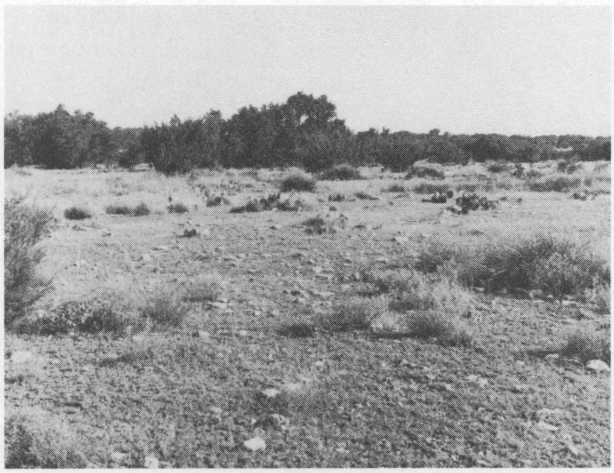
14. *Stockwater developments* reduce distance animals must travel. Space for uniform travel distance. Shut off waterings located in overused areas until vegetation recovers.

15. *Fencing* breaks large pastures into smaller, more manageable units. Locate fences with thought of how animals will travel from possible stockwater.

Salting, water and fencing offer most opportunities to improve distribution on Texas ranches.

SALTING

Proper salting, either alone or in a mixture with some other supplement, can be of great benefit in obtaining desired grazing distribution. Research has shown that stock usually go from water to grazing and then to salt, thus it is unnecessary to place salt and water together. By placing salt away from water, livestock will use forage which would go unused otherwise. Salt whets the appetite of a grass-eating animal.



Heavy yearlong grazing by sheep causes spot grazing and destruction of desirable forage.

An important point to remember when moving salt to a new location is to move it gradually or only to a distance where the new location is still within sight of the previous location. Avoid easily eroded areas for salting locations as well as areas of natural livestock congregation. Select salting areas lightly used and easily reached by livestock. Place salt boxes up to a half mile from water. Provide a salting area for each 40 to 50 head of cattle.

General guides for amounts of salt needed are 3 to 4 pounds per year per head for sheep and goats, 20 to 25 pounds for mature cattle and 30 to 40 pounds for horses. Granulated salt has proved more satisfactory than block salt.

WATER

Water is essential for the well-being of livestock. Additional watering locations offer not only the opportunity for better grazing distribution but also increased production. Under Texas conditions, development of new watering facilities usually means (1) drilling a well, putting in a pumping unit and constructing a tank and troughs; (2) constructing an earthen tank to impound runoff water; or (3) piping water to a new location. Economics and location usually dictate the type water development to be constructed.

Construct reservoirs to hold as much water as needed for usable rangeland reached by livestock, yet having as little surface area as possible to prevent evaporation. When feasible, fence earthen reservoirs and pipe water to troughs. This not only improves sanitation but also allows supply shut-off if the surrounding area needs resting for a time. Minimum daily requirements are 10 gallons per cow with calf and 1 gallon for a ewe and lamb or doe and kid.

FENCING

Fencing is needed to break large pastures into more manageable units and to facilitate development of a deferred-rotation grazing system. When planning new fences, avoid long, narrow pastures and pockets; consider maintenance and ease of construction; plan pastures according to range sites and potential forage production and divide permanent watering locations between pastures if possible.

The question of whether a practice will pay is the major one in determining which, if any, of these methods are feasible. For example: Consider a four-section pasture that can be cross-fenced into four pastures so a four-pasture deferred-rotation grazing program can be followed. Additional water would be necessary. Figures released by the Agricultural Stabilization and Conservation Service in 1967 report the average per acre costs of water development and fencing were $1.76 and $.84, respectively, or a per acre cost of $2.60 to initiate this type grazing system.

Results from studies at the Texas Experimental Ranch compared the deferred-rotation grazing system with pastures grazed yearlong. The system

Proper grazing yearlong with a combination of livestock allows range condition to remain static.

Deferred-rotation grazing allows range condition to improve and livestock production to increase.

brought an average increase of salable calf of 3.8 pounds per acre when grazed at an equivalent rate per acre. Assuming a price of $.25 per pound for calf sales this would be an increase return of $.95 per acre per year. The cost of fencing and water development could be recovered in 3 to 4 years. This demonstrates that investment costs required to initiate these practices can be recovered in a reasonable length of time. Deferred-rotation grazing systems also result in increased grazing capacity.

In summary, proper grazing distribution results in more efficient livestock production and, ultimately, greater profit.

Cooperative Extension Work in Agriculture and Home Economics, Texas A&M University and the United States Department of Agriculture cooperating. Distributed in furtherance of the Acts of Congress of May 8, 1914, as amended, and June 30, 1914.
10M—6-70 RM